

Board Meeting Minutes—158th Meeting

June 6, 2018

Board members present: Susan Brodahl, Melissa Cribbins (phone), Roger Hamilton, Lindsey Hardy, Mark Kendall, Debbie Kitchin, Alan Meyer, Anne Root, Steve Bloom (Oregon Public Utility Commission ex officio), Janine Benner (Oregon Department of Energy ex officio)

Board members absent: Eddie Sherman, Ernesto Fonseca

Staff attending: Amber Cole, Michael Colgrove, Steve Lacey, Debbie Menashe, Julianne Thacher, Becky Rein, Pati Presnail, Hannah Cruz, Art Sousa, Greg Stokes, Mike Bailey, Andy Eiden, Amanda Sales, Scott Clark, Betsy Kauffman, Sarah Castor, Andy Griguhn, Scott Leonard, Kate Scott, Andrew Shephard, Mark Wyman, Dave Moldal, Marshall Johnson, Ryan Crews, Oliver Kesting, Thad Roth, Andy Hudson, Amanda Potter, Jed Jorgensen, Ericka Kocielek, John Volkman, Tara Crookshank, Lily Xu, Peter Shaeffer

Others attending: Brendan McCarthy (Portland General Electric), Rick Hodges (NW Natural), Kari Greer (Pacific Power), Nicole Lynch (CLEAResult), Julie O'Shea (Farmers Conservation Alliance), David Wynde (Wynde Consulting), Jeff Manternach (Red Rock Biofuels), Jue Zhao (City of Salem), Ben Haney-Senior Project Manager, (City of Salem), Keith Kuenzi (City of Salem), Zach Snyder (public)

Business Meeting

Roger Hamilton called the meeting to order at 9:33 a.m. and asked for changes to the agenda. There were none.

General Public Comments

The president may defer specific public comment to the appropriate agenda topic. There were no public comments.

Consent Agenda

The consent agenda may be approved by a single motion, second and vote of the board. Any item on the consent agenda will be moved to the regular agenda upon the request from any member of the board.

The board noted Anne Root should be added to the Policy Committee roster.

MOTION: Approve consent agenda

Consent agenda includes:

- 1. April 4, 2018, board meeting minutes
- 2. Committee assignments—R837

RESOLUTION 837 BOARD COMMITTEE APPOINTMENTS (SUPERSEDES RESOLUTION 833)

WHEREAS:

- 1. Energy Trust of Oregon, Inc. Board of Directors are authorized to appoint by resolution committees to carry out the Board's business.
- 2. The Board President has nominated new directors to serve on the following committees.

It is therefore RESOLVED:

1. This resolution supersedes Resolution 833, adopted by the board at its February 22, 2018, meeting.

2. That the Board of Directors hereby appoints the following directors to the following committees for terms that will continue until a subsequent resolution changing committee appointments is adopted:

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Audit Committee
Anne Root, Chair
Melissa Cribbins
Mark Kendall
Karen Ward, outside expert
Roger Hamilton (ex officio)
Pati Presnail, staff liaison
Board Nominating Committee
Debbie Kitchin, Chair
Alan Meyer
Anne Root
Eddie Sherman
Steve Bloom, OPUC (ex officio)
Roger Hamilton (ex officio)
Greg Stokes, staff liaison
Compensation Committee (formerly 401(k) Committee)
TBD, Chair
Melissa Cribbins
Mark Kendall
Roger Hamilton (ex officio)
Debbie Goldberg Menashe, staff liaison
Executive Director Review Committee
Melissa Cribbins, Chair
Debbie Kitchin
Roger Hamilton (ex officio)
Finance Committee
Susan Brodahl, Chair
Ernesto Fonseca
Debbie Kitchin
Anne Root
Roger Hamilton (ex officio)
Pati Presnail, staff liaison
Policy Committee
Alan Meyer, Chair
Ernesto Fonseca
Eddie Sherman
Elaine Prause (ex officio)
Roger Hamilton (ex officio)
Debbie Goldberg Menashe, staff liaison
Program Evaluation Committee
Lindsey Hardy, Chair
Susan Brodahl
Alan Meyer
Ken Keating, expert outside reviewer
Non Neating, expert outside reviewer

- 3. The executive director, general counsel, or chief financial officer are authorized to sign routine 401(k) administrative documents on behalf of the board, or other documents if authorized by the Compensation Committee.
- 4. The board also acknowledges that the following board members have committed to attend advisory council meetings:
 - a. Conservation Advisory Council: Lindsey Hardy and Alan Meyer
 - b. Renewable Energy Advisory Council: Alan Meyer and Ernesto Fonseca

Moved by: Anne Root Seconded by: Debbie Kitchin

Vote: In favor: 7 Abstained: 0

Opposed: 0

President's Report

Roger Hamilton discussed a study in the Detroit metropolitan area on energy efficiency access in low-income neighborhoods. This University of Michigan study analyzed access to and purchase of energy-efficient light bulbs. In this study, the cost to upgrade from an incandescent to an LED was twice as much in low-income neighborhoods due to the absence of cheaper bulbs available at big box retailers. Roger is curious what percent of lighting accounts for the average Oregon monthly electric bill. He noted it is 20 percent on average nationally. Roger showed a chart that displayed cost per bulb of incandescent bulbs, compact fluorescent bulbs and LED bulbs compared to households below the federal poverty level. What does Energy Trust know about Oregon prices, and if there is a disparity between customers based on income, how can that be addressed? The board discussed how this issue might also be interrelated to awareness.

Mike Bailey noted staff has been looking very closely at lighting prices. Compared nationally, prices in Oregon are lower and it looks like the chart displayed is two or three years old. There are differences in prices based on the type of store, and the program has tiered retail stores as one, two or three to indicate big box retailer to local hardware store. Rural areas tend to have the tier 3 stores. The program is developing a transition plan this year as there has been a saturation of LEDs at the tier 1 stores, which includes big box retailers. The plan will acknowledge there is still opportunity in the other tiers. One gap in information is the program does not know the income level of who is purchasing the discounted bulbs at participating retailers. Mike noted the 20 percent statistic is fairly on par, an average home spending 20-30 percent on lighting is a good approximation.

Staff Report

Board of Directors Binder

Michael Colgrove introduced a new board of directors binder as a resource for new and existing board members. Board members are encouraged to review the binder and provide feedback. The binder was created at the suggestion of the Nominating Committee. Over time, it will be available electronically.

July Board Meeting

Michael reminded the board that the next meeting is July 25 and will be held in Klamath Falls. Board members are welcome to travel with staff or attend the meeting remotely at the Energy Trust office. Community outreach and customer site tours will be part of this board trip.

Secretary of State Performance Audit

Michael updated the board on the in-progress Secretary of State performance audit. The OPUC and Energy Trust received the draft audit and provided feedback. An exit interview with the auditors was held on June 4. It is expected the audit will be released to the public at the end of June. Michael noted the audit report is still confidential. More information will be shared once the audit is public. Commissioner Bloom thanked Pati Presnail, Amber Cole and staff for their support, analysis and review of the draft report. It was very helpful to the OPUC and the auditors.

Organizational Review Presentation

Amber Cole, Greg Stokes, Debbie Menashe and Betsy Kauffman provided the board with a status update on the Organizational Review Project. The project is to ensure Energy Trust is ready, nimble and adaptable for the future. The Organizational Review Team includes Betsy, Amber, Greg, Debbie Menashe and Scott Swearingen. Team members were selected to represent the entire organization and were not selected based on the group they work in.

Melissa Cribbins joined the meeting in person at 9:58 a.m.

Betsy noted the team is focused on taking an excellent organization and ensuring it can thrive in the future. The team has developed an executive summary, available to the board. Betsy noted the team's findings and recommendations have been vetted with staff and Management Team.

Debbie Menashe said the team was guided by guiding principles that included considering all organizational processes and structure, making recommendations that are adaptable for possible futures, engaging staff, consideration of change management and diversity, equity and inclusion, and gathering input from a variety of sources.

Debbie Menashe described the team's methodology and work plan over the past year. The process started with interviews of staff, Management Team and external stakeholders and organizations to gather thoughts on how organizations should prepare for change.

Amber described the International Development Research Centre organizational assessment tool the team used, which was field tested and refined over 30 years. The tool lists a variety of questions and performance indicators to consider when evaluating the external environment, organizational capacity, organizational motivation and organizational performance. The team walked through each question after the summer 2017 interviews.

Susan Brodahl joined the meeting at 10:10 a.m.

Amber described how staff was engaged on this project. More than 80 percent of staff participated in six workshops. Staff was highly engaged and provided both positive and critical feedback. She addressed the organizational design principles that emerged from their research and process. She said the principle "form follows function" guided the team's review. Design principles also included "align to strategy", "group similar functions" and "plan for scalability", among others.

The board asked how "centralize control functions" and "decentralize authority close to customer" work together as they seem mutually exclusive. Amber said it depends based on what part of the organization you are looking at. For instance, in Finance, standardization is very important while in program delivery, flexibility is needed to meet the evolving needs of customers. Greg provided detail on what "decentralized authority close to the customer" means, including providing more decision-making authority and autonomy to program managers instead of requiring them to send decisions up an authority chain. The board asked if "decentralize authority close to customer" is also related to the financial impact of the decision. The team confirmed that is the case. For instance, in the customer service area, representatives should be able to resolve low-level complaints while having a process to escalate a complaint that involves a larger dollar amount or implication.

Debbie Menashe reviewed the team's 10 categories of recommendations. Nine are process-oriented and the last, "organizational structure", is higher level and structure-oriented. Examples of specific recommendations within each category are in the executive summary. Debbie Menashe noted "organizational culture" emerged later in the process, was embedded in nearly all recommendations and is a critical element to success for the organization in the future.

Greg noted the team briefly considered the prioritization and sequencing of the recommendations. The intent is that the next team, the Organizational Review Implementation Planning team, will focus here in Quarter 3 and 4. The next team will develop a strategic timeline, identify resource needs and provide project briefs. Implementation would commence over 2019 and 2020. The board should expect items related to implementation to be in the 2019 budget, which they will review and act on in the fall.

The board discussed the role of the board in this project. They viewed the project as the purview of Michael and the Management Team, and asked if that is a standard approach from other organizations' organizational reviews. Amber confirmed and noted there might be changes to alter board policies or processes. If so, the board will be engaged. Michael said ongoing status updates will provide context for the board if board policy or process changes do come to the board.

The board asked if an inventory or assessment tool was used for the "organizational culture" recommendation. Debbie and Amber responded that no specific culture assessment tool was used, but that the organization assessment tool applied in general included many questions around culture.

The board asked if the team reviewed the structure of the board, board committees and advisory councils to the board. Debbie Menashe said the team did not examine those bodies.

The board cautioned the team on flexible staffing as it introduces competition between groups when more than one group wants one person. The team noted processes and expectations will be needed to help avoid this.

Michael thanked the team for its work, and noted the team exceeded his expectations.

The board asked if the team views their recommendations as transformational or incremental. Greg said the recommendations are not on either extreme; in combination these changes will result in a significant shift in the future but the team does not view this work as "transformational".

Budget Review Presentation

Pati Presnail, Jed Jorgensen, Mike Bailey and Oliver Kesting provided the board with an update on the Budget Review Project. Michael Colgrove introduced the team, which was formed to identify an option for an alternative budget process that might deliver the critical value the current budget provides and in a more efficient and effective manner. He recognized the full project team, which also includes Art Sousa, Alison Ebbott, Hannah Cruz, Scott Clark and Tara Crookshank.

Pati gave a high-level view of the current budget process, which is a six-month process and involves all areas of the organization as well as outreach and engagement with stakeholders and the public. Pati described the team's discovery process, which included creating guiding principles, mapping the current process, gathering feedback from staff and external stakeholders, interviewing five external organizations and drafting the budget recommendations.

Jed Jorgensen reviewed feedback from external stakeholders. The feedback noted the budget represents a significant workload for all parties. The team heard the timelines don't align with some stakeholder needs, for instance rate change filing timing. Stakeholders questioned if they have influence on the budget and action plan, and would like to be involved earlier in a more collaborative process. Jed reviewed feedback from staff, some of which was the same as feedback from external stakeholders. Staff provided recommendations as part of their surveys, and one suggestion is a better budgeting tool as the Excel-based tool is no longer adequate for the organization's complex budget. Staff would like more time for stakeholder input, and an easier process to make changes to the budget and to ease the budgeting workload that hits at the same time as program year-end close-out in Quarter 4.

Jed described how the current budget flows from a five-year strategic plan, five-year sector plans and two-year action plans. He said the proposed recommendation is to maintain the five-year strategic plan and change the five-year sector plans and two-year action plans to three-year plans for each. The new three-year sector plans and three-year action plans would be called the Business Plan. To develop the Business Plan, work groups would be formed to identify with staff key drivers that could have potential to change savings, costs and market uptake among other examples. The key drivers would be used to indicate to staff and the board if something significant has changed in the three-year Business Plan and requires a relook at the plan.

Jed said another suggestion from staff and stakeholders was to separate planning from budgeting. This recommendation addresses that. The planning strategy work would be conducted over a longer timeframe earlier in the year and only once every three years. That work would then inform annual

budgets, developed earlier in the fall each year. It is intended the work involved in the business planning would lead to a more streamlined and efficient fall budgeting process as stakeholders participate earlier and more deeply in the formation of the business plan and achieve agreement on the high-level goals.

Jed displayed a chart showing how the new Business Plan and annual budgeting process would be developed. For instance, in 2020 in the spring and summer, the Business Plan would be developed for 2021-2023. Also in 2020 in the fall, the 2021 annual budget would be developed. Then, in fall 2021 the 2022 budget would be developed and in fall 2022 the 2023 budget would be developed. Oliver Kesting provided a detailed explanation of this three-year business planning and annual budgeting recommendation. The Business Plan would include savings, generation and budget ranges, and sector, program and support group action plans. This information would be used to negotiate budgets with the utilities and board earlier than currently. Stakeholder engagement, including with the OPUC. Conservation Advisory Council and Renewable Energy Advisory Council, and public comment will also be solicited. Once approved, this becomes the Business Plan. The budgets would stay as annual budgets, and also include stakeholder engagement, public comment and board approval. The annual budget will be moved earlier in the fall and is expected to conclude by November instead of December. This gives staff more time to focus on year-end closeout and to develop upcoming contractor scopes of work. Oliver noted that if any key drivers change, the Business Plan would be relooked at as warranted. A review of key drivers will be included every spring to ensure the Business Plan stays current. Oliver said the team expects any relook at the Business Plan would be rare as the Business Plan uses ranges and a portfolio approach. If the Business Plan is always reopened every year, the benefits of moving to a three-year plan would disappear.

Oliver displayed a chart demonstrating workload across the organization between the current process and the proposed process. More planning timing will be needed every three years to create the Business Plan, and it is anticipated that will be offset by less work in the other two years of the cycle plus a shift in that work away from the heavy Quarter 4.

Mike Bailey reviewed the recommendations' critical success factors, including needing OPUC and utility support, improved forecasting abilities from Energy Trust and the utilities, increased flexibility in the use and level of program reserves and new budgeting software. Mike Bailey listed the expected benefits of the proposal, including increased stakeholder engagement, moving budgeting work for staff away from the year-end closeout season, increased program flexibility and an increased strategic perspective in the development of the budget and action plans.

At this point in the project, the team has presented to staff, utilities, the advisory councils and the board Finance Committee. Feedback included questions on the makeup and purview of the workgroups and the cost of the changes. Overall, there was broad support for the budget recommendation.

Michael Colgrove described the next steps. If there are no objections from the board today, this team will close out and a Budget Review Implementation Planning Team will form. Over the next six months, this second team will prepare a detailed implementation plan on who needs to be engaged, how and when. In 2019, a Budget Implementation Team will then be formed to take the plan and develop the budgeting software, planning processes, budgeting processes and engagement approach. Any needed budget is expected to be included in the 2019 budget, which will use the current process.

Commissioner Bloom appreciated the team's work and recommendation as presented to the OPUC, and supported Energy Trust to continue down the path of exploring it further.

The board is concerned about the large workload every three years to develop a Business Plan while still completing current work. Staff need to take into consideration the shift may only be shifting to another busy or subscribed time of year. Michael Colgrove noted that currently one issue is some projects are put on hold during Quarter 3 and Quarter 4 because of the time-intensive budget. This recommendation would help solve that issue.

The board appreciated the focus on increased collaboration and concern with the organization's forecasting approach and capabilities. The board noted how the five-year strategic plan and three-year Business Plan are out of alignment, can the strategic plan be updated more frequently? The team noted they are thinking around the alignment and will work with the Strategic Planning Committee. The board commented this recommendation aligns with the Organizational Review Team's recommendation around flexibility.

The board asked what the budgeting software solution will look like. Pati noted there are one or two tools the team is looking at.

The board asked who is part of the workgroups. Pati noted that is yet to be worked out by the Budget Review Implementation Planning Team.

The board questioned how this recommendation works with each of the five utility's integrated resource planning processes. Oliver noted each IRP is on a different schedule. The idea is the information from the Business Plan will inform those IRPs, and if new information is available, it will inform the next IRPs under development.

Planning and Evaluation

SBW Consulting Contract Amendment—Resolution 838

Phil Degens and Erika Kociolek introduced the resolution. SBW Consulting is conducting the 2013-2014 impact evaluation for the Production Efficiency program. The resolution requests the board approve an increase of \$33,000 to allow for activities not part of the contract's original scope of work. Staff consider the costs in line with similar costs and requests the board approve the resolution.

The board noted it is important to get scopes of work right at the outset, and noted it is not ideal that the contract came in under the \$500,000 limit, which would have required board approval at the beginning, and the increase brings it above that limit.

The board noted Production Efficiency programs are not as established as commercial and residential programs. The attributes needed to understand the performance of a program are not as dialed in as it is for those sectors.

The board asked what additional detail will be gathered by the spending increase. Phil said the information will inform the realization rates for the program, which ultimately determine reportable savings for the program, budgeting assumptions and true up.

The board asked whether the additional information will be relevant as some measures, like Strategic Energy Management, have a lifespan that is only three years and would be out-of-date in 2018 if using 2013 data. Phil said the three-year measure life for Strategic Energy Management is an assumption and something to continue exploring. The budget increase request is largely due to the primary research source, prior project documentation, not being detailed enough for the evaluator to complete the impact evaluation.

PROPOSED RESOLUTION 838

AUTHORIZING THE EXECUTIVE DIRECTOR TO EXECUTE AN AMENDMENT TO A CONTRACT WITH SBW CONSULTING

WHEREAS:

- 1. Following a competitive solicitation process conducted in March 2016, SBW Consulting was awarded the contract to conduct an impact evaluation for Energy Trust's Production Efficiency program, covering program years 2013-2014.
- 2. The Board of Directors of Energy Trust approved an amendment of the contract to authorize funding of up to \$540,000 for the impact evaluation services to be provided by SBW Consulting in July 2017.
- 3. SBW Consulting has continued to conduct the impact evaluation for Energy Trust's Production Efficiency program, but the scope of the evaluation has expanded to include additional activities that were not known at the time of the previous contract amendment. The added scope and budget of the proposed amended impact evaluation contract is to cover unanticipated additional detailed impact analysis for Strategic Energy Management (SEM) and custom projects in the Production Efficiency program in order to complete and report on impact evaluation savings results, and make observations and recommendations for program improvement.
- 4. The expected not-to-exceed maximum budget for completion of the amended services under the contract with SBW Consulting would be \$573,000, which increases the current contract budget by \$33,000, exceeds the executive director's signature authority and requires board of directors' approval.

It is therefore RESOLVED that the Board of Directors of Energy Trust of Oregon, Inc., hereby authorizes the executive director to sign an amendment to the contract for evaluation services for the 2013-2014 Production Efficiency program impact evaluation with SBW Consulting authorizing additional scope and added budget of up to \$33,000 for a total maximum budget cap of \$573,000.

Moved by: Debbie Kitchin Seconded by: Melissa Cribbins

Vote: In favor: 8 Abstained: 0

Opposed: 0

Irrigation Modernization Presentation

Jed Jorgensen introduced Julie O'Shea, Farmers Conservation Alliance executive director (FCA). Irrigation modernization is an initiative within the Other Renewables program. FCA has been working with Energy Trust since 2015 to help irrigation districts modernize their infrastructure for renewable energy potential, energy efficiency improvements, water and environmental benefits, and other economic and resiliency benefits.

Jed provided an overview of irrigation modernization, which is at the nexus of energy, water and agriculture. Food production uses about 80 percent of Oregon's water, and about half evaporates or seeps into the ground before reaching the farm. Irrigation districts utilize about 480 billion gallons of water a year, but the canals they use, including river diversions and fish screens are degrading or inadequate. These inadequacies and negative impacts are further exacerbated during drought years. Modernizing an irrigation system starts by replacing canals with pipe. By doing so, evaporation rates significantly decrease and the water becomes pressurized, which allows for a potential hydropower system where there is surplus pressure. This is non-impact hydropower potential and the main reason Energy Trust is supporting irrigation modernization. Jed reviewed a half dozen other benefits to modernizing irrigation infrastructure, including drought resilience and improved water temperature to benefit fish.

Jed said FCA has based much of its work on a few key projects, including the Three Sisters Irrigation District, which has participated with Energy Trust. Three Sisters Irrigation District has nearly completed a full pipe installation of its entire canal network, has one hydropower system installed so far and is starting construction on two additional hydropower systems. FCA is creating solutions that are comprehensive, bring multiple partners to the table and accelerate this work from being decades-long to years-long. FCA is helping bring irrigation modernization to scale in a replicable manner for the state of Oregon and even other states.

Julie noted that in the Western U.S. there are a million diversions of water from streams and rivers. In Oregon, there are 70,000 diversions. These diversions and the canals they use are 75 to 100 years old. Modernizing was left to the irrigation districts, irrigators and farmers. It was very difficult and costly for them to navigate the process to modernize. For instance, one district is 17 families and the cost of modernizing is \$20 million. Julie described the evolution of FCA, a nonprofit originally set to expand the use of the Farmers Irrigation District-licensed fish screen. Conducting outreach on the fish screen revealed the difficulties irrigation districts, irrigators and farmers were facing in general with their aging systems. These potential customers were needing help to modernize first and needed a trusted partner.

Julie said FCA stepped in, and working with Energy Trust, helped develop Energy Trust's irrigation modernization initiative. In a broader fashion, FCA now conducts outreach on holistic irrigation modernization in partnership with the targeted irrigation districts, supporting them with developing modernization plans, putting together financial packages and navigating a complex process that crosses multiple jurisdictions and agencies. FCA is also working with dozens of irrigation districts, making it easier for resource-constrained agencies to work with the districts. Currently, FCA is working with 16 districts; of which, eight are from the Deschutes Basin. Over time, FCA's work has led to securing \$50 million for those eight districts.

Julie reviewed a slide of the overall possibilities of irrigation modernization. Modernizing the first nine districts would result in 38 megawatts of hydropower capacity, 59,650 MWh of savings, 557 cubic feet per second of water conserved and 22,790 short-term jobs. FCA is receiving interest now from other states and at the federal level.

The board asked why there are no Eastern Oregon districts from the Hermiston area. Julie mentioned Owyhee Irrigation District just joined and FCA is also working with districts in the Umatilla area. Jed

noted there must also be a strong commitment from the district and district's board. Julie noted FCA is also working upstream in some of these districts.

The board asked if there is push-back from local landowners. Julie said that does happen and is generally connected to urbanization. FCA conducts a public process to educate landowners of the impact and the benefits.

The board asked how FCA is funded. Julie said their funding comes from Energy Trust and fish screen sales as well as a mix of funds from irrigation districts and private funding.

The board took a break from 12:23 – 12:38 p.m.

Energy Programs

Red Rock Biofuels Project—Resolution 839

Amanda Potter presented a request for the board to authorize incentives of up to \$2 million for an energy efficiency project associated with a biofuels production facility in Lakeview, Oregon, which is estimated to save at least 48 million kilowatt hours (5.5 average megawatts) per year. Amanda introduced David Wynde, consultant with Wynde Consulting, and Jeff Manternach, CEO of Red Rock Biofuels.

This megaproject was brought to the board in 2016. At that time, the board waived the Production Efficiency incentive cap on the condition that Red Rock secure financing by November 2016. They have now secured all funding, including \$245 million of state bonds and \$75 million from the Department of Defense. All major permits are in place.

Red Rock is part of a new biofuels production facility in Lakeview. It will convert woody biomass to energy and jet fuel. The efficiency project will convert waste heat to power that will be used onsite. Energy Trust performed significant due diligence in reviewing this project, including reviewing all materials and Red Rock financial statements. There was no risk identified based on the structure of Energy Trust incentives, which includes paying incentives only after energy savings have been realized.

The board asked about risks. Amanda responded that risks are around the overall biofuels project, which is the first of its kind at this scale, not regarding the energy-efficiency project.

Energy Trust estimates levelized costs to be lower than Production Efficiency standard projects.

The board asked about the feedstock. Jeff responded that existing feedstock agreements are with private landowners. It's primarily Ponderosa pine, with other mixed conifers.

The board asked if the conversion process is enzyme-based. Jeff said no, the Red Rock process is not biological or enzymatic, but rather thermocatalytic, using heat and temperature to drive the conversion.

The board asked why the facility is sited in Oregon. Jeff said Oregon is a great place for feedstock because there is a lot of waste wood on private and federal lands that would otherwise burn up.

The board asked when the construction is expected to be completed. Amanda responded that there are intermediate construction milestones, and the facility needs to be built by September 2021. This gives an eight-month cushion for potential delays.

The board asked if the project has an energy facility siting permit. Jeff said no, because the project doesn't have air emissions so it is considered a minor source and the permit is not required. Janine noted that facility siting permits are required based on production volume.

RESOLUTION 839 WAIVING PROGRAM INCENTIVE CAP AND APPROVING INCENTIVES FOR THE RED ROCK EFFICIENCY PROJECT

WHEREAS:

- The Energy Trust Production Efficiency program has worked with Red Rock Biofuels, LLC (Red Rock) to identify a custom waste heat to energy system project (the Project) in connection with the gasification process at Red Rock's new biofuel production facility, to be
 - constructed and located in Lakeview, Oregon.
- Energy efficiency aspects of the Project were reviewed through standard Energy Trust processes for complex custom-track industrial projects, including a technical energy analysis study commissioned by Energy Trust and carried out by a waste heat to power expert.
- 3. The Project's energy savings will be very cost-effective compared to the cost of savings from the average Production Efficiency program custom project. The incentive for the Project is projected and would be budgeted at \$.0417/first-year kWh, a levelized cost of <0.5 cent/kWh; while Production Efficiency program custom capital projects average \$.13/first-year kWh, or about 2-3 cents levelized.
- 4. Energy Trust funding would be contingent on Red Rock's agreement to suspend selfdirection at the facility site where the Project is located for at least three years.
- 5. Electric energy generated by the Project will be used by Red Rock on-site to reduce the amount of electricity purchased for the facility.
- 6. Energy Trust funding would be conditioned on Red Rock's construction completion by September 2021 and would be payable annually based on savings performance.

It is therefore RESOLVED that the board of directors of Energy Trust of Oregon:

- 1. Waives the Production Efficiency Program's incentive cap for this project; and
- 2. Authorizes the executive director to negotiate and sign an incentive agreement with Red Rock Biofuels LLC for up to \$2 million in total incentives payable on the following terms and conditions:
 - · Agreement to suspend self-direction at the site for at least three years;
 - Incentives to be paid in annual payments tied to savings performance;
 - Post-installation measurement, verification and evaluation plans for the Project will be required;
 - Red Rock to complete construction by September 2021

Moved by: Melissa Cribbins Seconded by: Debbie Kitchin

Vote: In favor: 8 Abstained: 0

Opposed: 0

Willow Lake Gas Biogas Project—Resolution 840

Jed Jorgensen and Lily Xu presented a request for the board to authorize an incentive of \$3 million for the Willow Lake biogas project with the City of Salem. Biogas is a focus area for the Other Renewables program. This will be the seventh biogas project with municipalities. Staff focuses on these projects because municipalities are stable, long-term partners, projects are net-metered and retail rates are higher than wholesale. Energy Trust brings expertise in supporting these projects. This project has very few risks and reasonable costs.

Lily introduced three City of Salem employees, Wastewater Treatment Division Manager Jue Zhao, Senior Project Manager Ben Haney and Assistant City Engineer Keith Kuenzi. She provided a summary of the project. The facility is located in Salem and uses anaerobic digestion to generate biogas from organic waste matter, which is used to produce heat and electricity. Salem has operated its wastewater treatment plant since 1964, and the existing engine is near the end of its useful life. The city is proposing a new engine, system and building. The project would produce energy at 7.6 cents per kWh for 20 years, and will deliver power to PGE. The project is expected to come online at the end of 2019.

Energy Trust does not expect any complications with this project. Generation is expected to reach optimum output by year 20. All of the generation will be consumed onsite, eliminating nearly 50 percent of the facility's current energy needs. Total capital project costs are expected to be \$9.7 million, with annual maintenance costs around \$210,000.

The city has secured a \$3 million PGE Renewable Development Fund grant and is pursuing a \$250,000 Oregon Department of Energy Renewable Energy Development grant, and will recover other costs through rates. Above-market costs are calculated to be \$3.2 million.

Staff proposes an incentive of \$3 million with \$500,000 paid upon commercial generation and subsequent payments based on quarterly production. There are a few minor risks that the city is expected to overcome, including potential installation of a fiber optic line for interconnection with the utility and potential high costs of a construction bid. This project has many strengths, including economic and environmental benefits, economies of scale, an experienced team, performance of due diligence and adherence to best practices.

Directors Alan Meyer and Mark Kendall recused themselves because they are Salem residents and taxpayers.

The board asked if it's typical for a municipal project to receive so much utility ratepayer funding. Jed explained that the PGE grant is from voluntary funds. This is not typical, but there is no typical scenario for these very large and complex projects.

The board asked how this spending will impact other projects, such as irrigation modernization. Jed responded most irrigation districts are in Pacific Power territory, such as in Eastern Oregon. Biogas

projects are some of the larger funding opportunities in PGE territory. These funds are not competitive with other project funds.

RESOLUTION 840

AUTHORIZING INCENTIVES FOR THE WILLOW LAKE BIOGAS FACILITY

WHEREAS:

- In November 2017, Energy Trust began a competitive process to allocate up to \$4.0 million in incentives for renewable energy facilities in Portland General Electric service territory and \$2 million in Pacific Power territory. Two applications were received, one hydropower and the City of Salem's proposed Willow Lake Biogas Project.
- 2. The City of Salem proposes to install a 1,176-kW cogeneration engine and biogas cleaning equipment at the existing Willow Lake Water Pollution Control Facility, resulting in 7,610 MWh of generation annually, on average. Generated power would offset energy consumed from Portland General Electric. Project construction is expected to begin in winter 2018, with commissioning and testing to start in in fall 2019, and commercial operation in winter 2019.
- Staff finds that the project has significant strengths in that it will be built by an entity with a
 proven track record as a biogas cogeneration operator, it will be municipally owned, and it
 has secured a significant grant. Staff sees no significant permitting challenges and few
 other risks.
- 4. Above-market costs are \$3,210,710 (present value) over a 20-year period if the project does not receive a RED grant or \$3,048,673 if the project receives a \$175,000 RED grant.
- 5. Staff proposes an incentive of up to \$3,000,000 to be paid partially up front and partially over time based on actual generation. The first payment would be \$500,000, payable upon the project achieving commercial operation. Subsequent payments would be made quarterly at a rate of \$0.25 per kWh generated as long as the project achieves at least 75% of the expected generation for the quarter.
- 6. On a present-value basis, Energy Trust's incentive is worth \$2,706,790, representing 85% to 88% of the project's above-market cost. At \$3.45 million/aMW, the incentive is in the range for has previously supported biogas projects.
- 7. Staff proposes to seek Renewable Energy Certificates (RECs) equivalent to 85 percent to 88 percent of the project's expected generation over 20 years and to include milestones in the funding agreement with the City of Salem to allow Energy Trust to withdraw funding if the project is unable to move forward.

It is RESOLVED that the Executive Director, or his designee, is authorized to negotiate and execute a funding agreement for up to \$3,000,000 in incentives to offset the above- market cost of the 1,176-kW Willow Lake Biogas Facility owned by the City of Salem, consistent with the terms outlined above.

Moved by: Debbie Kitchin Seconded by: Anne Root

Vote: In favor: 6 Abstained: 2

Opposed: 0

Jessica Iplikci and Oliver Kesting presented a request for the board to authorize staff to negotiate and sign for a New Buildings program management contract with CLEAResult for an initial term of three years, with the potential for up to two one-year extensions for a total contract term not to exceed five years.

Energy Trust policy requires competitive solicitation of Program Management Contractor contracts every five years. The fifth and final year of Energy Trust's current contract with CLEAResult to deliver the New Buildings program is 2018. The competitive selection process is a best practice and ensures continued value for ratepayers.

Through the process, staff consulted with a diversity, equity and inclusion consultant for input on the draft Request for Proposals language. The team reviewing responses was comprised of staff, a NEEA representative and a DEI expert. Energy Trust received nine intents to respond and two proposals. Scoring criteria included cost at 40 percent, design and delivery at 25 percent, strength and cohesiveness of the program team at 20 percent and DEI at 15 percent. The review team concluded that CLEAResult submitted the strongest proposal. Strengths included the ability to deliver cost-effective energy savings, a focus on strategic program design, ability to develop new measures and offerings, ability to support broader market engagement and engage diverse customers, and ability to develop new partnerships.

The board noted that there were nine intents to respond but only two proposals. Is that an unusually small number of responses? Oliver explained that some entities that expressed an intent to respond partnered on a proposal. New Buildings is a very complex program so it's typical to get a small pool of respondents. Jessica added that there are subcontractors as part of the CLEAResult contract, so Energy Trust will work with some new subcontractors.

RESOLUTION 841

AUTHORIZE A PROGRAM MANAGEMENT CONTRACT FOR THE NEW BUILDINGS PROGRAM

WHEREAS:

- 1. With assistance from a selection committee including outside parties, staff has conducted a fair and open procurement process to select a program management contractor to manage New Buildings program services for the next 3-5 years;
- 2. CLEAResult Consulting, Inc. was selected and contract terms are being negotiated;
- 3. Staff has assumed and estimated a total first-year program management budget for 2019, including first-year incentives, contracted delivery, and possible performance compensation of approximately \$21,131,372 million, which includes approximately \$6,135,922 million in program delivery, \$92,847 in solar delivery, \$12,183,809 in incentives, and internal Energy Trust costs.
- 4. Actual savings and costs will be reviewed by the Energy Trust board as part of the annual budget and action plan process. Based on current assumptions, staff estimates the following program savings and fully loaded costs in 2019:

	Electric	Gas
Savings	56,510,692 kWh	1,039,233 therms
\$/Unit Savings	\$ 0.328/kWh	\$2.523/therm
Levelized Cost	\$0.030 /kWh	\$ 0.216 /therm

It is therefore RESOLVED:

8. Subject to determination of a final contract amount based on the board-approved 2019 budget, the executive director or his or her designee is authorized to enter into a contract with CLEAResult Consulting, Inc. to manage the New Buildings program for an initial term from January 1, 2019 through December 31, 2021.

- 9. First-year contract costs and savings goals included in the contract shall be consistent with the board-approved 2019 budget and two-year action plan. Thereafter, the contract may be amended consistent with the board's annual budget and action plan decisions and the executive director or his designee is authorized to sign any such contract amendments.
- 10. The final contract may include a provision allowing staff to offer one-year extensions beyond the initial term if the program management contractor meets certain established performance criteria. In no event would the total term of the contract plus extensions exceed five years.
- 11. Before extending this contract beyond the initial term, staff will report to the board on the program management contractor's progress and staff's recommendation for any additional extension time periods. If the board does not object to extension, contract terms would remain as approved in the most recent action plans, budgets and contract at the time of extension, and the executive director or his designee is authorized to sign any such contract extensions.

Moved by: Alan Meyer Seconded by: Lindsey Hardy

Vote: In favor: 8 Abstained: 0

Opposed: 0

Commissioner Bloom left the meeting at 12:50 pm.

Committee and Advisory Council Reports

Finance Committee, Susan Brodahl

The March 2018 financial statements are in the board packet. The variance of revenue is very close to the same time period last year. Reserves are trending as anticipated.

Compensation Committee, Debbie Menashe for Dan Enloe

At the April meeting, staff and Director Enloe discussed the transition of Energy Trust's 401(k) plan from The Standard to The Principle and Cable Hill Partners. Staff also gave an update on the fund lineup mapping. The transition is going smoothly. The funds have been transferred and the one-month black-out period should end June 24. Education meetings with staff have occurred.

Staff also provided at the meeting an updated on the 2017 employee performance review process, which resulted in a range of merit increases. Staff also completed a pay equity analysis with a statistical firm in Maryland, reviewing staff compensation at various levels. There were about four roles with suspect differences, which is a difference of more than 10 percent of like-positions. Upon deeper review, it was determined the differences were allowable.

Going forward, staff is working to prepare an organizational compensation philosophy to help guide decisions around compensation and compensation structure for the organization. Staff will update the Compensation Committee as this work proceeds.

While the pay equity analysis won't be completed annually going forward, staff will take lessons learned into future years.

Evaluation Committee, Lindsey Hardy

At the last meeting, the committee reviewed the draft customer insights study. Once a staff response is drafted, it will be posted online. The survey received 1,000 respondents, half participants and half non-participants. Findings indicate participants are more likely to be white, have higher education levels, be employed, own their own home, make higher incomes and have children in the home. Findings also indicate utilities are more a source of information on programs than Energy Trust. Barriers to making improvements beyond money is time constraints and not owning their own homes. An area of opportunity for Energy Trust is respondents are more likely to talk to friends and family about energy use.

The board commented on the finding that more than 50 percent of those surveyed use a website as a major source of information and how this speaks to the value of Energy Trust's website. Sarah Castor noted the respondents are not necessarily talking about Energy Trust's website specifically but any website.

The committee reviewed a residential grow light study. It's the first of its kind for this market. The biggest opportunity for improvement are those people using HID lighting instead of LED lighting. Most people buying HIDs are buying at brick and mortar stores while LEDs were purchased online. An area for consideration is trying to understand the market size. Monthly energy use is not a concern to these consumers but upfront cost is.

The committee also reviewed the 2017 Fast Feedback results. There is great satisfaction with Energy Trust programs at 93 percent, and even higher when looking only at non-residential programs where it is 97 percent. The survey is moving online for 2018.

The committee reviewed a solar verification process evaluation. There is high quality control in the solar market for Energy Trust-incented systems. Verifiers outside Energy Trust territory report that Energy-Trust-supported systems are of higher quality, crediting Energy Trust's verification process. Some participants are willing to pay up to \$100 for verification, showing the value of this service provided by Energy Trust.

The committee reviewed the Existing Buildings impact evaluation. The objective of impact evaluations is to estimate realized savings. The evaluation assessed Strategic Energy Management, the standard track, the custom track and the lighting track.

Policy Committee, Alan Meyer

The committee reviewed the projects and contract reviews the board voted on today. There were no policies up for review. The committee ran out of time to discuss a process for evaluating new opportunities funded outside the public purpose charge. This process was drafted after the community solar discussion in November 2017. The committee approved three new Conservation Advisory Council members: Jason Klotz from Portland General Electric, Dave Moody from Bonneville Power Administration and Will Gehrke from Citizens' Utility Board of Oregon.

Strategic Planning Committee, Mark Kendall

The Board Strategic Planning Workshop was in late May. Mark thanked the board for participating and engaging in the discussion. Mark thanked the staff who supported the workshop behind the scenes. Next steps are for the committee to develop a work plan and outreach schedule for the 2020-2024 Strategic Plan.

Board Nominating Committee, Debbie Kitchin

The committee finalized a process document for recruitment, selection and orientation of new board members. The process will be used to fill the open board seats. Revisions to the process may be made as those recruitments proceed. Debbie Kitchin anticipated interviews to take place in mid to late August. Staff will provide the directors with talking points to use when communicating with people who have been nominated. The board noted nomination communications need to be clear this is a non-stakeholder board of directors. The Nominating Committee is taking a balanced approach to nominating candidates that are outside this industry and those steeped in energy policy. Debbie Kitchin clarified the process has a two-part orientation for new members, and encouraging all board members to attend. In addition, a separate annual board training may be developed that includes board member obligations as well as a presentation by the OPUC.

Conservation Advisory Council, Lindsey Hardy and Alan Meyer

At the May meeting, the council reviewed an air conditioning study to determine potential cost-effectiveness. The results of the study indicated very limited and specific instances where air conditioning might be cost effective. The council then spent time to review the results of an interactive workshop in March on what topics to bring to the council, at what point in process and how to present it to the council. Out of that March discussion, staff drafted a guidance document to inform the in-place Conservation Advisory Council operating agreements. The guidance document lists six categories of topics staff will strive to bring forth to the council, commitment to engage with them differently and an exploration of bringing in different facilitation techniques. The council will review both documents at the June 20 meeting and staff will check back in on the topic at the November meeting.

The board noted they see the Conservation Advisory Council as having technical expertise that board members don't necessarily have and their role is to support staff with deep knowledge of the efficiency world.

Renewable Energy Advisory Council, Alan Meyer

At the May meeting, the Solar program brought forth a program status update given the state Residential Energy Tax Credit expiration. There has been a market decline in solar installations and applications. The Solar program provided an analysis on the impact to peak from installations, as requested by the OPUC. The meeting also included a discussion on solar and storage, and what Energy Trust's role is in the market. The council reviewed the Willow Lake biogas project, as well as a hydropower project at Wallowa Lake State Park. The latter project's incentive is below the threshold requiring board approval. The council also reviewed the strategic planning process, and potential implications of the SB 1149 sunset on renewable energy program planning.

Adjournment

The board adjourned at 2:33 p.m.

The next meeting of the Energy Trust Board of Directors will be on Wednesday, July 25, at 10 a.m. at the Oregon Institute of Technology Campus – Sunset Room, 3201 Campus Drive, Klamath Falls, OR 97601 and Energy Trust of Oregon Office – 421 SW Oak Street, Suite 300, Portland, Oregon 97204.

/s/ Mark Kendall	
Mark Kendall, Secretary	